

AMATEUR RADIO



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Vol. 4 No. 5

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. . Editorial . .

It is the supreme gift of a hobby for a devotee to find in it a complete relaxation from the worries and troubles of daily life. What a boon it is to come home at night and be able to "immerse oneself," if the expression may be applied, in radio after a hard, worrying day's work. A sense of contentment begins to pervade one's nature, the troubles and worries of the day, that before loomed so large, seem to recede to their correct perspective. Our hobby is the mental and physical panacea "in excelsis," but for how many?

In order to obtain the ultimate satisfaction and pleasure, we, individually and collectively, must make our contribution towards Ham Radio. It asks little enough of us for what we receive in return, but that small contribution seems far too much for a percentage of our modern-day amateurs. He gives nothing, this type of ham, in return he receives little from his hobby and, after a short period, drifts out of the game entirely. He will never understand the invisible bond that embraces the old hams; he will never understand that loyalty which every old-timer knows; to him will ever remain a mystery all that is grandest in the great old game.

Yet, just a little unselfishness, just a little of his time given spontaneously, could alter his outlook entirely, could rejuvenate his waning interest and could initiate him to that inner circle of those who "through giving, receive." In an altogether different theme, Wordsworth put the same thought: "Give all thou canst, High Heaven rejects the lore of nicely calculated less or more."

So many do nothing and expect all; some are not members of the W.I.A., yet gladly enjoy the privileges obtained by the Institute. "I give nothing and demand all" is their cry, and receiving nothing they usually lose interest altogether.

"Amateur Radio" can furnish an example of this type of Ham. Individually he criticises, yet never lifts a hand to help. Collectively he withholds the only assistance that is worth anything—his unqualified support and co-operation. Victoria has borne the whole burden of getting going and maintaining the Magazine, gladly, because she felt that in it lay an essential part of the welfare of the Australian Ham. She has carried on its publication practically unaided by outside support, with the result that members who were working on it had to neglect Divisional work. What a difference would be reflected in its pages if only each other Division rendered a little support! Victoria has had to find all advertisements, practically every article that has appeared, and publish the Magazine as well. As "Amateur Radio" is a Federal organ, Victoria has a right to expect—stronger still, she has a right to demand—interstate co-operation. As if the above were not sufficient, most Divisions are lagging in their payments. Thus the position is rapidly becoming intolerable; added to the burdens she is already carrying is added that of carrying interstate financial commitments.

Victorian Hams stand 100 per cent. behind their Magazine; they are proud of it and shall always have it. But they are not going to be forced to carry a financial loss for men who will not lift a finger to help their own official organ. This Magazine is yours, you Interstate men, with fair and reasonable support it will remain yours, but a continuation of your present attitude can bring only one result. Our hand will be forced for our own members' sakes, and you and those who come after you will ever feel the shame that your Magazine had to be withdrawn from your State because of your lack of support. It is little enough you are asked, and the alternative is a stigma that will be impossible to live down. Victoria will always have "Amateur Radio," but its future in your State is in your hands.

A Rehash on Grid Modulation

By Gordon Weynton (VK3XU/
VK5XU).

Much has been written regarding this subject, but still some of us have difficulty in getting things going just as they should; therefore, perhaps, a few wrinkles may not be out of place.

The most attractive feature of this system is low cost and relative simplicity of the modulating equipment, but the one drawback is that, if we do not make the adjustment of the transmitter intelligently, good results are not always obtained.

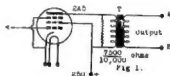
There is little to be gained by covering the operating principles and the question of tube efficiency and tube capacity, because this has all been handled by people more competent than the writer; but let us get down to brass tacks.

We will deal with two well-known systems, the one known as control grid modulation and the other as Telefunken modulation. Let us take the former system first. Firstly you have a modulator, which consists of, say, a 24A and a 2A5 or a 56 and a 45. Well, be quite sure that the output of this gear is perfectly free of any hum or other bugs which will eventually cause you trouble. The plate voltage on the modulator tube, i.e., the 2A5 or the 45, as the case may be, is fed through the primary of a 1:1 Class B input transformer, and across the primary terminals a load of between 7,000 and 10,000 ohms should be placed, the secondary of this transformer going to the grid-filament circuit of the tube to be modulated. (See Fig. 1.) Terminal A to grid and Terminal B to filament-earth circuit.

The essentials of the modulator unit are that it must be entirely shielded, and the resistor across the transformer primary should be capable of dissipating 5 watts.

Now, turning to the transmitter, we will firstly deal with the tubes in the stage to be modulated. These may be

210, 801 push pull or single ended, 46 in parallel or push pull, or our old friend E406, push pull or single ended. A 203A or a 211 could be included, but as these are not as common as the others mentioned, we will confine our remarks to them, although in general they will also apply to the larger tubes.



If the stage to be modulated contains such tubes as 210, 801 or E406, then battery bias is essential, but if 46 tubes are used grid leak bias can be used. Fig. 2 shows the circuit of a single-ended 46 P.A., but for our purpose we will deal only with the grid circuit, which will be the same for two tubes in parallel, and the only difference between this circuit and one using a '10 or an 801 will be that the resistance of 2,000 ohms will be replaced by battery bias. Push-pull circuits are essentially the same, so let us go.

(1) A means whereby the excitation can be conveniently reduced must be provided, so use a variable coupling condenser. If you use link you can still reduce your coupling.

(2) R.F. must not get back through the choke, so see you have got a good one—preferably a National or a Hammarlund. R.F. feed back will give you a bad spin, and is the cause of 50 per cent. of the bad operation.

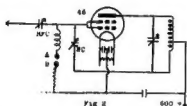
(3) Neutralisation must be complete and not half baked, like so many rigs. Bad neutralisation causes 25 per cent. of bad operation.

(4) Battery bias must be easily adjusted step by step at not more than 25 volts per step.

Now for the adjustments. First for low m.u. tubes, such as an 801, 210 and E406.

There are four variables—grid bias, r.f. excitation voltage, loading and audio grid swing. A bit more formidable than Class C plate modulated amplifier, but it is easy once you get the hang of it.

(1) Determine the operating plate current. For example, two type 10 tubes in push pull have a plate dissipation of 30 watts, but an output of



about 15 watts can only be expected, since the carrier output can be considered to be equal to half the plate dissipation rating. The total input will be, therefore, the output plus the plate losses, or 45 watts, or 500 volts at 90 mls.

(2) Having arrived at the operating current and plate voltage, set the bias at slightly beyond cut-off.

(3) Apply all excitation available and adjust antenna to maximum current. Plate mls. will be high, but never mind.

(4) Leaving all other adjustments alone, increase negative bias until plate current drops to operating value determined above.

(5) With audio gain at peak, speak in the microphone. Antenna current should rise, and so should plate mls. Back off again on modulator until the plate current shows only an occasional upward flicker.

This operating procedure should result in optimum power output under most conditions.

Now let us look at the high m.u. tube, such as a 46 or a 2A5.

We will assume in all cases that you will have two of these tubes either push pull or parallel, since greater output will be achieved.

If you have two tubes in parallel, it is absolutely essential that there is

no parasitic oscillation present and that the load is divided as evenly as possible between the tubes.

The following are the adjustments:—

(1) Tune up exactly the same as for C.W. work, only increase loading until maximum antenna current is obtained.

(2) Plug in the output of the modulator and watch the plate mls. drop.

(3) Decrease excitation until antenna current is halved and plate mls. drop by one-third over the reading obtained on adjustment in (1) above.

(4) With audio gain at full, speak into the microphone. The antenna current should rise and the plate mls. jump. If this does not occur, decrease excitation until the plate mls. do jump.

(5) Adjust plate mls. to normal rated figure by increase or decrease in drive, and adjust gain on modulator unit to give slight flicker in plate milliammeter on peaks.

(6) Check the quality on a crystal monitor.

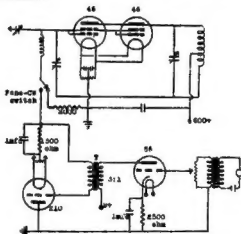


Fig. 3.

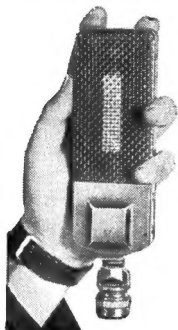
This operating procedure should result in optimum power output under most conditions. However, should the plate mls. move down instead of up, a decrease in excitation will be necessary, despite the fact that normal plate mls. are shown.

Now, the other system, known as Telefunken, operates somewhat differently, but just as good results are

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to be obtained. In fact, you cannot tell the difference between the two. Just in case somebody doesn't know the circuit, have a look over Fig. 3. The circuit uses 46 tubes, but if a 210 or similar tube is to be used, the fixed bias of 2,000 ohms will be replaced by battery bias or grid-leak bias of a higher order.

We must remember that the 210 tube in the diagram represents a grid leak, and matches up best for a 46 tube or other high m.u. tubes. If a medium m.u. tube, such as a 210, is used in the R.F. power amplifier, this tube will be replaced by a 56 or a 27 type tube, and the cathode will be in circuit, but be careful to bypass the filament circuit to earth in this case, and make the bias on the 27 or 56 tube 2,500 ohms, instead of 1,500, as shown in the diagram.

The adjustments for all types of tubes are as follow:—

(1) Apply all excitation possible and adjust antenna current to maximum.

(2) Plug in the modulator and note antenna current and plate mls.; then reduce excitation until antenna current is half that obtained in (1) above.

(3) With audio gain at peak, speak into the microphone.

Antenna current should rise, and so should plate mls.; then back off gain until there is only an occasional flicker on modulation peaks.

In actual practice this system is easier to get going than control grid system. However, both have their pitfalls, the control grid system being slightly more troublesome.

We set out some of the precautions to be taken to secure proper operation earlier in this article. Now let us turn to one of the biggest bug-bears of grid modulation—R.F. feedback. This is caused mainly by R.F. getting through the chokes and feeding into the modulator circuit. Once this happens you cannot proceed until you have entirely eliminated it. All the howls and squeals will occur even with the microphone circuit open, and when this circuit is closed even worse noises will occur. Therefore, be sure

your chokes do a job of work. Modulator and submodulator should be run off an independent source of supply to the transmitter supply. The writer tried a common source, using the buffer-oscillator supply to feed the modulator, and the result was disaster. Don't try it. In the control grid system a reversal of the output terminals of the transformer can cure R.F. feedback.

The only solution is to shield everything and use good chokes.

Downward modulation is common, and can only be cured by proper adjustment of antenna load and R.F. excitation. Nothing else will do, unless, perhaps, a slight bias adjustment on medium m.u. tubes.

Bear in mind high m.u. tubes draw greater grid current, and so the modulator unit is loaded to a greater extent. Therefore, adequate input to the modulator tube must be provided. All key filters must be out of circuit, and the modulator unit should be out of the R.F. field of coils and condensers.

Summing up, a grid-bias modulated amplifier offers a means of obtaining 'phone operation with a minimum of additional equipment, and when handled properly is capable of giving results which cannot be called other than satisfactory.

Proper adjustment is necessary. Handle the adjustments intelligently and you will get results.

The editorial committee desires to express its appreciation of those contributors who send in "small articles." These are generally accompanied by a rather humble and apologetic note from the author hoping they won't be considered presumptuous. Believe it or not, we think "little fish are sweet." Many thanks.—Editor.

Hydroplaning on 56 M.C.

By VK5LD.

At the invitation of the S.A. Outboard Motor Club, the Institute provided radio equipment and operators to accurately time the hydroplane races held on the River Murray at Murray Bridge, South Australia, during Easter.

For ease of operation and portability transceivers for 5 metres were constructed by 5ZX, 5KI., 5HD, 5GP and J. McAllister.

The equipment at the starter's end used the township's mains, 230 volts D.C., and that at the one-mile buoy was powered from dry batteries and located on a pontoon landing stage. Consistent R8/9 signals were maintained throughout the week-end; a little trouble was experienced from motor exhaust noise, but, strange to relate, ignition QRM was hardly noticeable.

Antennas were of the vertical doublet type with ordinary lighting flex feed lines, thirty feet high at the starter's end and about three feet above the water at the mile mark.

The portable calls of 5WI/X and 5ZX/X were officially allotted, and, in addition to 56m.c. working, the 3.5 m.c. and 7m.c. bands were operated on using a crystal tritet oscillator powered from a genemotor delivering 180 volts. Both telephony and C.W. contacts were established with both interstate and suburban stations. Reports on reception of these transmissions during Easter would be appreciated by the Division.

To enable the time-keepers to check the start and finish of a race, duplicate head sets were provided, so that watches could be stopped immediately the signal that a boat had crossed the sight line was given. It was then a simple matter for the time-keepers at each end to communicate and announce the winning driver's time.

The W.I.A. party were fortunate in meeting Crosby Walch, better known

perhaps as VK7CW, who, as representative for Tasmania, piloted an outboard of the same name.

We were indeed glad to be able to congratulate VK7CW on establishing an Australian record of 40 m.p.h. for a hull fitted with a "Class B" motor, his heady driving also enabling him to win two other races from the crack pilots of both N.S.W. and S.A.

On Easter Saturday evening we were the guests of the Outboard Club at dinner at the Bridgeport Hotel, a very jolly gathering, with much humorous speech-making. The Commodore expressed his appreciation of our work in making such a success of the timing arrangements, to which a suitable response on behalf of the Institute as a whole was tendered. In conclusion, our thanks are due to the Outboard Club for enabling us to participate in their function; also to the tavern masters who never failed us in our many requests, and last, but not least, to the YL's who helped us during the evening hours to forget. Oh, boy! What a holiday!

The editorial committee have been in receipt of considerable publicity from W6MDJ, re the "Golden Gate Bridge." The opening of this splendid structure is to take place in 1938, so save up your pennies and prepare to visit San Francisco for the World's Fair. All amateurs are welcome and further information or booklets can be obtained from W6MDJ. A hearty welcome is assured to any ham from the "Frisco" gang.—VK3WG.

SILENT KEY.

It is with regret that we have to announce the passing of "Bill" Roberts, VK5NR. 5NR was well known for his 200-metre phone transmissions and general amateur work. He was only 21 years old.

This station is situated in Albury, and has been licensed since November, 1928.

The first xmitter used was a TpTg, with two tens in parallel, and excellent results were obtained with inputs of ten watts or less.

After two years xtal control was put in es has been used ever since, and probably accounts for the fine work done by this station.

The present xmitter line up uses a 46 as co, 210 doubler, 210 buffer, link coupled to a 203A in the final.

For fone, Heising modulation is used when an 801 serves as modulated amplifier with a 250 as modulator.

In the speech amp. we find a Reiss mike fed into a 56, resistance coupled to another 56, which is in turn coupled by transformer to the 250.

The frame in which the rig is fitted is 4ft. 6ins. high, with four shelves.

The two lower ones contain the power supplies—a 400 volt one for the co. and doubler, a 400 to 700 volts supply for the buffer, and a 1250 volt supply, using a pair of 66's as rectifiers for the final.

The third shelf contains the co., doubler and buffer stages, and the top shelf carries the final.

The speech amplifier and the modulator are housed in a separate frame with their power supplies.

Two receivers are in use—one a two-tube job with a 6C6 electron coupled, and a 37 amplifier. The other rx which is generally used is a S.S. Super with regeneration.

A half-wave 7 m.c. Zepp is the standard antenna, but many different types are tried. The height at the free end is about 70 feet, and the feeder end is 30 feet.

Probably the best performance registered is WAC in two hours. Both WAC and WBE have been done on 7 and 14 m.c. on cw., and the tally of 80 countries speaks for itself.

And yet it's all going to be changed!
—VK2IG.

The pirate using VK3JA's call on the 3.5 m.c. band can have the Yank cards which are coming to hand, on application to VK3JA.

We note that 3KR and 3TL are forwarding the Northern District Notes. Thanks, a.m.'s.—Editor.

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(Conducted by R. E. Jones, VK3RJ,
Federal QSL Manager.)

Another year has passed and the usefulness of the Bureau continues to increase. Following are the figures for the Bureau since it was established in 1931:—

| Year ending | Cards handled |
|------------------------|---------------|
| March 31, 1932 | 9,790 |
| March 31, 1933 | 18,333 |
| March 31, 1934 | 18,686 |
| March 31, 1935 | 22,043 |
| March 31, 1936 | 27,110 |

The total number of cards handled in the five years is 95,962.—Nuff sed.

The unique DX contest propounded by "Utopia" for Melbourne hams, and set down for decision on the last Sunday in April, has aroused great interest. The method of scoring, while seemingly ludicrous at first glance, is rather novel, and results will be eagerly awaited.

A visitor to Melbourne during April was "Snowy" Harrison, VK3CN, ex VK7CH, and lately located at Shepparton. We were pleased to renew our acquaintance with "Snow", who casually mentioned that he intended to take unto himself a wife during the latter end of the month. Our congratulations. "Snow," and may your married life be as successful as your DX efforts.

Victoria has benefited at the expense of New South Wales by the transfer to Victoria of Dave Duff, VK2EO, who is now located at Crib Point, Victoria, and will use the call sign VK3EO. Dave, who is in the Navy, is an asset to any State.

Cards are on hand at the Bureau, 23 Landale-street, Box Hill, for the following VK3 stations, who may secure same by forwarding a stamped envelope:—

VK3 AN, AT, BJ, BN, CV, CZ, DG, DQ, EO, ES, FB, FQ, GA, GP, GV, GY, HE, JT, JZ, KA, KG, KY, MK, MX, NA, OD, OI, OK, PC, PH, QR, QY, RE, RM, RQ, RW, TC, TE, UF, UJ, VF, WH, WP, XF, ZB, ZF, ZK, ZW, NYE, Seibre.

Cards for the following have been on hand for some time, and unless claimed by 31st May they will help to warm the bath-water for the Jones family:—

VK3 AH, AX, AY, BE, BR, BX, CA, CW, DL, ET, EW, FC, FM, FW, IL, JL, JR, KB, KD, KM, KS, KT, LP, LS, NJ, OB, OP, OZ, RZ, SL, TA, UY, VK, WC, WX, YL, ZA, ZX, Endacott, Grimwood, Scott, Lavender, Thompson.

We have been publishing N.S.W. Division box number wrongly for some time and desire to point out that Box 1734JJ, G.P.O., Sydney, is the divisional address. Unfortunately, in January and March issues, we published some notes from VK2 as "Federal Notes," mainly because they were of such a general and useful nature. However, the mistake may have caused inconvenience, so we are anxious to point out the error.

N.S.W. State Exhibition

The plans have been completed for the N.S.W. Division's State-wide Exhibition which will be held during the week of 15th to the 20th June, in the Lower Hall of the Presbyterian Assembly Buildings, Wynyard-square, Sydney. The times are as follows:— Opening 7.30 p.m. Monday, with the official opening at 8 p.m.; Tuesday, 6 p.m. till 10 p.m.; Wednesday, 12 noon till 10 p.m.; Thursday, 6 p.m. till 10 p.m.; Friday, 6 p.m. till 10 p.m.; and Saturday, 10 a.m. till 10 p.m. That is from Monday, the 15th, till Saturday, the 20th of June, inclusive. An extensive series of competitions have been arranged and should cater for everyone.

The floor space is over 6,000 square feet and the Institute is making every endeavour to make the exhibition an unqualified success. It means a terrific amount of organisation. They are going to have their television demonstration, transmitters working on all bands, ultra high frequency demonstrations, a first-class lecture every night, and military signal demonstration. The Institute appreciates it is really time the amateurs of this State put on a show to demonstrate to the public their activities.

K. B. Warner, Secretary to the A.R.R.L. and I.A.R.U., has been approached to open the exhibition, via W2XAF, the N.B.C. Station in New York, and A.W.A. has kindly offered to take the broadcast through their receiving station and allow replies to be transmitted back through VK2ME.

There are distinct sections of competitions: (1) for affiliated clubs and (2) for amateurs in general.

Under the first section there are two competitions: (a) The Wireless Weekly Cup to be awarded to the best stall exhibit of amateur gear by an affiliated club; (b) £3/3/- first, and £2/2/- second, to the best pieces of amateur gear contained on those stalls. These prizes are donated by Wireless Weekly.

The second series comprise six sections, A to F, and first and second

prizes are awarded in each section:—

(a) The most efficiently-designed and correctly-built multi-band transmitter.

(b) The most efficiently-designed and correctly-built amateur receiver.

(c) The most compact, complete, portable station, efficiency, design and method of building to be considered.

(d) The best U.H.F. receiver.

(e) The best U.H.F. transmitter.

(f) The best example of a piece of amateur apparatus, excluding gear that could not be exhibited in sections (a) to (e) (wave meter, P.A., monitor, key, mike, etc.).

It is necessary to include with each entry a description of the gear and points of merit and circuit diagram.

Points will be awarded for: (a) design; (b) workmanship; (c) covering description. The competitions are open to all members of the Institute and its affiliated clubs, and to all other short wave experimenters, at the price of 2/6 per entry.

The prize list for the second series has not been completed, but the following will give some idea as to the value:—

Best transmitter: 1st, 50-watt Philips R.F. Penthode.

U.H.F. transmitter: pair of TCO, 3/5.

U.H.F. receiver: £2/2/-.

Best piece of apparatus: Thermo-coupled R.F. meter.

Other prizes available and not allotted as yet are crystal microphone, filter condensers and condensers. The final prize list and general publicity will be forwarded to all amateurs in N.S.W. Entries will be received at the Lower Hall up till 6.30 p.m. on June 15th. The possibilities of a comprehensive (insurance) policy

(Continued on Page 12)

W.I.A. Dinner

The annual dinner of the N.S.W. Division of the Wireless Institute of Australia is becoming a very well-known yearly event in amateur radio circles. The 1936 dinner, held at the Dungowan Cafe on 26th March, was a success.

The new President of the Institute in this State, Mr. H. Petterson, was in the chair, and the dinner was officially opened with the toast of "The King."

The President reminded those present of the great losses that amateur radio had suffered in the passing of Colonel Clair Foster and Hiram Percy Maxim. In memory of these two fine "Ihams" a silence of one minute was observed.

The toast of "The Institute" was moved by Lieut. McCormack, of the Army Signals, who mentioned how the Army was dependent, to a large degree, for their operators on the amateurs. He also expressed the opinion that in the case of a national emergency, the experimenters, especially if properly organised, would be of inestimable value to the Commonwealth, and, in concluding, he wished the Institute every success in their endeavours to forward the radio game.

Mr. W. M. Moore, Federal President, replied on behalf of the Institute, and mentioned the efforts of the body in the past and since its inauguration in 1910, and said he was sure that the Institute and its members would do all in their power to further the radio art.

The Senior Radio Inspector, Mr. W. T. S. Crawford, representing the Department, was present, and replied to the toast "The Radio Inspectors' Department," proposed by Mr. D. B. Knock, who said the Institute, and amateurs in general, appreciated the support afforded them.

Mr. Crawford, in replying, stated the Department had always been interested in the Institute's activities, and he was pleased to be present. At the conclusion of his reply, Mr. Crawford kindly

consented to answer any questions concerning the regulations. Quite a few members and visitors present availed themselves of the offer.

Messrs. Moyle, of "Wireless Weekly," and Knock, of "The Bulletin," replied to the toast of "The Radio Press," and both spoke of the valuable work being done by amateurs. Mr. H. Chinner moved that toast.

"Associated Societies" were toasted, and the following replied:—I.A.R.U., H. W. S. Caldecott; BERU-RSGB, J. Corbin; A.R.R.L., E. Colyer; Lakemba Radio Club, Mr. Clarke; Waverley, Mr. Wells; Manly, Mr. Shelley; and Zero Beat, Mr. Miller. VR3AM, of Ocean Island, was a welcome guest, and replied on behalf of the visitors. The Country Vice-President, Mr. O. Chapman, was also down from Wyong.

Some of the high-lights included the glowing references to the retiring council, replied to by Frank Goyen; 2JX ability to mix marbles and drinks; 2AG and 2GP formation of a left wing; Manly versus Zero Beat side bets on a competition; and, finally, the increased capacity H.C. without a doubt.

.....
(Continued from Page 11)

being taken out for all gear is being considered.

One section of the hall has been taken for trade exhibits, and some ten firms who have amateur apparatus to show have notified the Institute of their willingness to participate. Further particulars will appear in all radio magazines and the daily press, so everyone is asked to build with an eye on the exhibition.

Further details from the Secretary, N.S.W. Division, W.I.A., Box 1734JJ, G.P.O., Sydney.

Federal Notes

The month of April saw not only a great amount of activity on the part of certain members who handled traffic during the search for the lost Dragon-Rapide machine, but a general increase in all Districts. At the moment the enthusiasm appears to be at its highest, which can be noticed more especially by the rapidly decreasing stock of Reserve crystals at H.Q. It shows that members are beginning to wake up again after a run of DX contests, 28 m.c. activities and a general lull in activity. A systematic training programme was submitted to all D/C's during the month, and if carried out should keep members busy for at least two years. It rests with the enthusiasm of the D/C's.

Congratulations must be handed to 4A3, 4B1, 4Z1 and 5A2, as well as others who took part in the lost Rapide search. Figures showing hours of operating and number of words handled are not yet available, but for about a fortnight each station put in at least four hours a day on the key. VJT was the central station during the operations, and Reservists kept a watchful eye out for signals from the search machines, both from the air and on the ground.

Seven new members have been enrolled during the month, and at least six more are waiting finalisation of their applications. A final appeal is made to stations that have been inactive for some time to get busy and recommence training, otherwise a resignation will be reluctantly requested.

3rd DISTRICT.

(By VK3UK-3Z1.)

It seems to be the most difficult thing in the world to write notes when one is on holidays. 3Z1 is having a spell in N.S.W. Had a wet, cold drive to Sydney around the coast, and went on to the Blue Mountains. Up to the time of writing the rain hasn't stopped, so the holiday officially hasn't started. In the absence of 3Z1, 3Z2

is carrying on the running of the schedules.

As usual, no schedule was kept by VMC on Easter Saturday, and the following week some interesting portable tests are going to be carried out on schedule by our metropolitan stations—3B4, 3C2, 3C6, 3D3, 3D5. They are taking their gear up into the hills and will carry on normal schedule work as well as making experiments in various aspects of the problems.

Two points we are endeavoring to do throughout VMC in the future is to make all our portable equipment standardised from the viewpoint of filament and plate supplies. To make our portable organisation sufficiently flexible any power supply must be interchangeable with any other. The other point is an essential—that all transmitters must be crystal controlled on Reserve frequencies.

3A4 is moving to a new QRA shortly and will be rebuilding his gear then. In the meantime his 47-45 outfit is doing great work.

3A5 passed through Melbourne on his way to Lorne on holidays.

3A6 has made a welcome re-appearance on schedules after his illness.

3B3 and 3C3 had a visit from 3Z2 and VK3YP, and, as may be expected, stirred up even more enthusiasm in 28 m.c. work, especially in the former man.

All VMC joins with me in offering heartiest congratulations to 3C4 on his recent venture into double harness. May 3C4 and Mrs. Powers have a lifetime of health and happiness.

3C6, in his capacity as Divisional traffic manager, is organising a 56 m.c. field day, which will be attended by the majority of the boys.

3D2 is away in N.S.W. on a well-earned holiday.

We are delighted to welcome a number of new members this month, in-

cluding 3KJ, 3WW, 3MK and 3ZR. We hope they will be able to settle down quickly in the organisation.

5th DISTRICT.

(By 5Z1-5SU.)

VME is showing more signs of activity than ever before, and all members of the first section have been issued with crystals. Four of them are already on watch with CC. Watches are being held each Friday from 2100 to 2300, and broadcasts on procedure are being given by 5Z1. Owing to the skip causing some country stations to be inaudible, excellent scope for practice in relay procedure is available through 5A2. For the benefit of country members it is proposed to hold another watch either at 0700 Saturdays or during the weekends.

4th DISTRICT.

(By 4Z1-4AW.)

After a somewhat dormant period of activity VMD has sprouted to life with renewed energy. Our crystals have been allotted to active members for section work. The crystal fundamental and harmonic frequency are both reserve channels, so good use will be made of this convenient allocation for general coverage of this large District during all seasons. 4A5 and 4B1 have taken over command of VMD1 and VMD2 respectively. Two VK stations have made application for membership, namely, VK4WT and VK4LK, who are very enthusiastic. These appointments will complete two sections for VMD. At the time of writing 4A3, 4B1 and 4Z1 have co-operated with VJT, 1A1 and 5A2, providing fairly constant watch on signals from VMZAT operating from Newcastle Waters in the search for the lost Rapide aircraft.

28 AND 56M.C. SECTION.

(Conducted by VK3JJ.)

The 28m.c. band is now improving to such an extent that during the past few weeks it has been almost impossible to strike an off day. Many more stations are active and it certainly sounds more like 14 than 28m.c. South Africa was perhaps the easiest DX, and several of these stations remained audible for as long as five hours in the afternoons. ZS1H was the strongest, but was closely followed by ZE1JJ, ZS2A and ZT6K. Several others, including ZT6Y, ZU1C, ZE1JU and FB8AB are much weaker, but did not have much difficulty in working VK's.

Europe was the only continent seldom heard, and the signals which did come through in the early evenings were very weak. Judging by the way we hear J stations working LU around 0700 GMT (4 a.m. in LU), it should be possible for us to work Europe in our early mornings. Has any VK worked DX between midnight and 6 a.m. lately?

Several VK3's who were active on 10m.x. several years ago are now back on the air again, and locally 3GU, 3FM, 3BJ, 3CZ and 3CX all put out strong signals. New country stations who are doing well with DX are 3KR, 3HM, 3HL and 3GM. Two other VK3's to WAC on 28m.c. are 3NM and 3OC.

Complaints of the irregularity of size of "Amateur Radio" come to hand from time to time, and the Editorial Committee wish something could be done about it, but so far no remedy has been discovered. However, we will try to be more accurate in future. "Amateur Radio" was first printed in October, 1933, and has gone through some stages since then.—Editor.

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N.S.W. Division

W. G. Ryan, Secretary, VK2TI, Box 1734JJ, G.P.O., Sydney.

COUNTRY ZONE OFFICERS.

ZONE 1 (Far West)—

J. Perooz, VK2PE, Hope-st., Bourke.

ZONE 2 (North West)—

H. Hutton, VK2HV, Byron-street, Inverell.

ZONE 3 (North Coast)—

R. J. Berry, VK2NY, 54 Bacon-street, Grafton.

ZONE 4 ((Hunter River and Coal-fields)—S. Grimmett, VK2ZW, 101 Tudor-street, Hamilton.

ZONE 5 (South Coast and South West)—R. Ross, VK2IG, 673 David-street, Albury.

N.S.W. NOTES.

(By VK2BX.)

The outstanding DX station during the good conditions of late March and early April was ZS1H. He was there practically every afternoon from 3 to 6.30 p.m., and reaches R8, Qsa5 at times, always with a very FB T9x signal. On a Sunday afternoon ZS1H seems to work a constant stream of VK's and ZL's. ZT6K is another South African who put in an appearance

here on 10th April with an R7 NDC signal, but faded a fair bit.

OA4J seems to be the big noise from South America and comes through fairly consistently between 2 and 5 p.m. with a good RAC note and usually about QSA3/4 R3/5. K8 stations are improving now and come through from about 11 a.m. to 3.30 p.m. W6 stations seem to get through to New Zealand as late as 3 p.m. Sydney time, but fade out here between 1 and 2 p.m. European signals are very scarce now. FA8BG is on the lookout for VK and ZL's at 1800 GMT. (04.00 East. time).

The ZL's seem to be about quarter of a mile away, judging by the noise they have been making during the last few weeks. ZL4FK is outstanding with FB phone, and CW signals QSA5 and up to R8. ZL's 1BA, 1CD, 1GX, 2BG, 1HY, 3JA, 4FW and 3JA all reach R7 and come through consistently.

VK2LZ very quiet now, but only has to come on for a minute and raises some DX for sure. VK2EO has been moved to Melbourne and by now should be on the air again. The VIS gang want to know why the VIM gang pinch all our leading 10 m.x. DX stations? Remember old 2EP, Boys? And now poor 2EO has gone, too! If one more 10m.x. DX station goes south, the VK2 gang will be forced to consider "applying sanctions" against VK3!

VK2YC has gone to the dogs completely. I mean, the dog-fight on 7 m.c. VK2AS drops down to ten occasionally, working W, ZS, etc., fairly easy. VK2UC is giving 10 m.x. a go, but seems to be too interested in 20 m.x. phone. VK2AE puts out an R8 signal but DX not much yet. VK2BX finally busted out on 28m.c. and QSO'd all ZL districts and ZS1H, and was heard by ZT6K.

NORTH SHORE ZONE.

(By VK2VG.)

2AE heads the list for the North Shore (the alphabetical list), and has been doing some good duplex fone work. 2BJ's pet about the shack is his xtal mike, and although heard on 40 occasionally, has been very active with the recent formation of the North Suburban Radio Club. 2HL also contributes largely to this cause, his shack being opened for long hours to the many hams round about. Don, of 2DR, has not been heard for some months, but expect the coming winter will bring him out on 80 once again. 2DU's excellent fone from Wollstonecraft was heard once during a Sunday afternoon in April; don't remember having heard him for many months previous to that. 2FV in Mosman will shortly have a good fone rig on the air. Jack would be pleased to compare notes with any ham who has tried 2A5's in resistance coupled P.P. for audio amplifiers. 2GD is seen regularly at 2HL's, and is on and off the air, but finds work keeps him most busy. 2HA keeps the whole BCL population of Greenwich in entertainment down at the bottom end of the B.C. band, although actually he has his three stages on 40! 2HG puts out good fone, using Telefunken modulation and no speech amplifier; he works a Ford coil into the apparatus somewhere. 2HY still finds new countries to work on 20, and gets them, too. 2HZ's fone on 20 gets out well to the DX, although much business connected with ham radio off the air keeps Bill most busy. 2IP is heard more often from 2LZ's mike than his own. 2LD from Lane Cove puts out a strong signal on 40 from a S.E. rig. 2LZ was busy building during the Easter holidays. Guess his nearby B.C.L.'s will be dreading the approach of winter, when Con will be including 80 mx in his band selection. 2NN is

heard occasionally from Roseville on fone, but is not very strong down at this quarter. Paul 2NV (ex 2KA), who has been off the air for a year, will shortly stage a comeback, modulating a pair of tens in P.P. with a pair of 2A5's in P.P. 2PV puts out a good T9 signal to W on 40 at nights when QRM is not too bad. 2QF has a strong carrier on fone, but the modulation when last heard was not quite doing justice; however it should be FB by this. The S.E. T9 sig of 2SS is still being hard to equal on 40, and quite a host of Yanks are attracted by it. 2TD combines CW and fone, and the quality of both are excellent (as usual). Artarmon QRM is mobilising lately with 2VE, 2VQ, 2VP, 2VL, with 2VI and 2VG in the adjoining suburbs of Chatswood and Greenwich respectively. When they all come on together it's like a trench mortar. 2WW has not been heard lately. Guess its QRL study, eh, Bill? 2YC still gets more QSL's sent to him than he works stations. However, we are more pleased than sorry in his case. 2YA manages one local rag chew a week, but when the school holidays come he will have more time to work DX than mark examination papers.

ZONE 4.

(By VK2ZW.)

The re-incarnation of the WIA is a source of gratification here. Best of good wishes to the new team in VIS.

Would be pleased if Coalfield's gang would keep me posted on news for Zone Notes.

2JZ, the old timer from Singleton, still remains in ham obscurity, but is said to be making a pile out of the country B.C.L.S. His ham broadcasting xmitter on 240 mx has become very popular.

The Wyong crowd are not very active, although OC has frequency stidules going.

A new ham has started up in Swansea, on Lake Macquarie, OE (Mr. Allworth). OE had some experience in the early spark days, but has only just returned to active radio. He is using a 45 SE sig at present. The location being excellent, we should hear of great doings there soon. A hearty welcome, o.m.

Ron Glassop, RF, has shifted to Toronto, also on the Lake, and is very active. His fone is of high quality. Using "B" class modulation and bends, he works DX by the mile. He won the N.A.R.C. Electronics Cup this quarter with a remarkable collection of dx.

ZW is still rebuilding and the time something good to look upon with an 852 in final stages. Next month should see a switchover on ceremony.

A. Fanhall, 2KB, gets into double harness this month and sails for U.S.A. for a motor tour of that country. We all join in wishing him all happiness.

ZONE 5.

(By VK2IG.)

Condx hr fair on all bands, though 40 not very consistent (excepting grml). On 20 W's coming in at all hours at great strength, many being r9 both on fone as cw. Somewhere about 400 to 500 W's have been contacted during the last month between 2QE as IG on twenty. Little other dx.

2QE complains that he has ruined up his not this week. (Why pick on this week, o.m.?)

2UE on nearly every lunch hour on 40 having chews with the regulars there.

2OD gg to put in high power (when?). Wld EU visited IG os had the thrill of a qso last Sunday, hi!

2OJ all in bits is being remodelled. If the new xmmitter works as well as it looks the gang will all want supers.

2YI says that he is enjoying ship life. Anyway, we knew Harry wasn't truthful!

2IG qso'ing plenty w's but nil other DX. New antenna seems vy fb for North America, tho condx at present favorable there, so hard to tell yet.

W9MIN wants to know whether anyone can challenge his claim of a record in his working D4ARR on four bands. Sounds vy fb to us. (Via 2QE).

F7JDY of Noumea, New Caledonia, reports 2IG as qsa 8:r9 t9. Sure must have been readable, hi! His sigs were Qsa 5:r6 t9x. hr wid input of 1 watt to

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Amateur Radio

a couple of B405's in a Mesny circuit. Rather good work, too.

W4AH on fone (q5r8) trying for records in working VK cw's before breakfast (his breakfast!). Record abt 14 stns.

LAKEMBA RADIO CLUB—VK2LR.

The above club meets every second Tuesday at the clubrooms, 334 Canterbury Road, Hurlstone Park. The annual re-union will be held on Wednesday, 6th May, at the "Donnybrook" Hall, Canterbury. The usual silver cups and prizes will be presented. The winner of the Slade Cup for the DX contest was VK2KS. The official result of the Chanex-Dulytic contest has not yet been announced, but it is anticipated that 2KS will also carry off the prize in the latter contest. Congratulations are extended to Leo Myers on his very creditable performance. The most active members of the 5-metre group are 2OD and Mr. L. Taylor. A new transmitter recently constructed by 2OD, and operated at Hurlstone Park, was heard on Kurrajong Heights at a good R6, with excellent quality on both speech and music. At the recent A.O.P.C. exam. three candidates from Lakemba Club presented themselves, and we trust that they were successful in obtaining a satisfactory pass. By the time these notes appear a new committee will have been elected, as the last meeting in April is election night. The re-union is held the following week, details of which will appear in next month's "Amateur Radio."

NEWCASTLE RADIO CLUB.

(By 2RF.)

The club meetings present busy scenes these days from 7 p.m. onwards, as five associate members are being prepared for the A.O.P.C.

A new member is Mr. Allworth, who is awaiting his call-sign. He threatens to blow holes in the air soon at Swansea with p.p. 45's.

ZW still rebuilding; likewise KB. By the time these notes appear Alan will be en route for U.S.A., to see where the big sigs. come from.

TY pounding plenty of brass, and UF still chasing DX on m.x.

The club DX contest, with three weeks to go, has developed into a duel between MT and RF, MT concentrating on 20 m.x., and RF on 40; at the moment MT is 19 points ahead. RF has been picking up with extra points for phone contacts; Class B modulations with 46's is used on p.p. 210's.

The annual Hamfest is definitely to be held on the first week-end in September, and the Newcastle lads promise visitors an even better time than they had last year.

Victorian Division

PHONE SECTION NOTES

The meeting of this Section, held at the W.I.A. rooms on 31st March, was well attended by the loyal supporters of the Phone gang. In addition to those who always attend we had the pleasure of 3TM's company. Bert is usually there in spirit only, likewise 3JR.

Allocations were dished up in the time-honoured style, and everyone received what they wanted (within reason).

The Phone transmitters are to be congratulated on their good work in the last couple of months for the publicity given to the new A.O.P.C. class. These announcements prove of greater value than the individual members concerned may have imagined, resulting in a very satisfactory enrolment.

Activity on the phone 200 m.x. band is about the same as usual. On week nights such stations as 3HF, 3FW, 3RI, 3PA, 3CB, 3TM, 3EL, 3LN and 3JR can be heard feeding Australasia in general with classical, "hot" or otherwise, music in the course of their experimental transmissions.

This is supposed to be exclusively 200 m.x. phone in this department, but it is impossible to resist reporting the sudden appearance on the 56 to 60 m.c. band none other than our worthy chairman, VK3TH. Following hot in the wake of TH, VK3CR was also heard on Sunday evening last on this band.

Well now, boys, we have the chairman, the vice-chairman, and the secretary active on 5 m.x., so why not the

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rest of our infallible phone gang, and show the rest of the Institute how "phone" ought to be done?

3FW has been on 5 m.x. before, but rumour hath it that he will be there again in the space of a week with a special stunt.

3HF still commences on Saturday nights and runs till the "not so early" hours of Sunday morning—in fact, the clock quite regularly reads 4.30 a.m. now when Harry and Graham say "good night." Why not keep on until 10 a.m. and make a job of it, HF?

In the case of 3TM, the same remarks apply, except that they start on Sunday night.

3LN seemed to have an idea that the transmission was not nearly as good as it really was—when he was heard to be worrying aloud on 1400 k.c. the other night about a HUM!

3EL was heard using the audio frequency system of a standard B.C.L. receiver as a modulator during the reconstruction of the regular modulator.

—73's VK3DH.

WESTERN DISTRICT NOTES.

(By 3OW, 3HG.)

With 3OW recently returned from holidays and 3HG still away, radio activity has been somewhat diminished here.

3HG is at present in N.S.W. and is operating a portable, with call 3EF. This is putting out good signals, with the aid of a 6v.-180v. dynamotor, and regular skeds are run with the "home" stations.

Conditions on 14 m.c. and 28 m.c. have been very good, whilst there is plenty of activity on 7 m.c. and 3.5 m.c.

The new receiver at 3OW, whilst lacking nothing in sensitivity, gave a good deal of trouble on the selectivity side, but the trouble now appears to be eliminated, and op. is awaiting the return of 3HG—not without certain misgivings, all the same, hi!

3PG still working DX, and now has over the century in European stations worked.

3NC, on the staff of 3HA Hamilton, is planning a return to the air, so keep a look-out for him on 3.5 m.c.

3JA not heard since he left Warrnambool to live on the farm. 3WW still active with good phone on 7 m.c. and 3.5 m.c. 3XI working phone on 3.5 m.c. only.

With the colder nights coming on again a low angle radiator, actuated by a petrol drive, is proving very popular at 3OW, so call in, gang, when passing and test the radiation!

Queensland Division

Another year has passed in the annals of the Queensland Division. The annual general meeting was held at headquarters on 3rd April, at which was a large attendance of members—37 to be exact—and visitors in the persons of VK2BJ, Mr. G. Stroefeldt 4GS, and Mr. Riley, of the Radio Inspector's Department. At the conclusion of the various reports the president had pleasure in presenting the following trophies:—

The Mackenzie gold trophy for the best station was presented to VK4AP, and a red pennant to 4WT as second place. This is for annual competition and is won on station design and layout and actual performance.

The Cran trophy for the best performance in contests during the year went to 4BB, with 4EI as the runner-up.

The W.I.A. trophy for the most meritorious performance during the year was won by VK4AP for his first WAC on 10 metres. 4BB received second place and a red pennant for being WBE on 10 metres. This trophy is won outright.

For having secured first place in a recent VK4/ZL contest VK4JF won the W.I.A. Council trophy.

To commemorate the first VK/Euro-pean contact on 10 metres, 4EI received a special trophy suitably engraved with the letters to that effect.

Pennants were presented to the winning team in the last Fisk trophy contest, namely, 4EI, 4BB and 4AW.

The election of officers for the coming year resulted in the following being elected:—President, Mr. A. E. Walz, VK4AW; secretary, Mr. F. O'Laughlin, VK4OL; assistant secretary, Mr. P. Pelly; treasurer, Mr. W. Chitham, VK4UU; council, Messrs. J. Bates, VK4UR; A. Guildford, VK4AP; P. Hubscher, VK4UL; P. Bauers. Mr. W. Wishart, 4WT, has since been appointed traffic manager.

During a recent radio dealers' conference we had the pleasure of meeting personally quite a number of country members who happened along on this occasion.

Conditions on 10 metres are becoming poor these days. Things seem to be going haywire. ZL stations and others are beginning to fade and play tricks like pre-DX days. VK4US reports hearing HJ station at midday recently at good strength, but no contact. Peak period seems to be during November, December and January. We wonder if such conditions will return later in the year. We shall see.

4HR has a super working 10 and 20, and drags the DX in in fine style, specially the Yank fone on these bands.

4VH was heard recently at 4FB exchanging hot numbers with 4HA on 40 metre fone. 4HA has improved his fone lately and gets good reports from dual-wave receivers.

4JB back again from the West and after more countries. Delights in telling 4RY of his new contacts, but Old Bill manages to keep at least one country ahead. What's wrong with the 53, Ock?

4GA, 4LK and 4JW, constituting the North-west Rock-crushers' Club, may be heard chewing the rag each Sunday morning. 4JW specialises in the old 201A and Ford coil outfit. Takes a lot of beating where no power is available.

4WT finally got the 52 working as the PA in his rig. Bill's rig has been christened the Queen Mary owing to the white baseboard and long lay-out extending one side of the shack to the other, and the time taken to complete. He was presented at the annual meeting with a defunct Marconi MT7A to put in as the final amplifier of the

first known amphibian transmitter, as the boys termed it.

4UR is concentrating on DX and has gone crystal to live up to the reputation and ideals of the "U" gang.

4LB encountered parasites in his push-pull rig and finally overcame the trouble by rebuilding.

4GU is having trouble getting rid of hum in his sub-modulator unit.

Both 4ES and 4TN use DC mains at Bundaberg with no filter at all. 4TN sure makes a noise on the 201A and can he speed the old hand key up?

4ES is going in for crystal, using DC tubes off the mains push-pull parallel PA on 240 volts to make an impression. 4ES is very strong in VIB in daylight.

4LN just appointed first officer and operator to Qantas' flying DH86's.

South Australian Division

Well, chaps, the end of the Institute's year has come, and now several new faces are to be seen in office. The annual general meeting was held on 1st April. The retiring president, Mr. Richardson, was presented with an electric timepiece donated by all members of the Institute. Mr. Barbier (5MD) was duly elected the new president, and the members on the Council should be able to manage affairs for the next 12 months. Visitors to the meeting were Mr. Whitburn (5BY), Mr. De Cure (5IH) and Mr. Doddy (6WH). The meeting took the form of a social, with light entertainment from a mouth-organ band under the management of Mr. McAllister.

At the transmitters' annual meeting on 25th March Mr. Pearn (5PN) was elected president, Mr. Dean (5LD) secretary, and Mr. Lloyd (5HD) assistant secretary.

AMONGST THE BOYS.

(By VK5KL.)

5MY reported married, but showed up at meeting and proved himself innocent. Take care, Harry!

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Tasmanian Division

(By 7PA.)

5BY enjoyed himself at annual meeting while presenting 5YK with present by teasing him abt his 50 watters. Doug. vows he will come back and take an active part in the Institute's affairs. FB, o.m.

5WP showed himself and told sum really gud yarns. Admitted he knows all about YLS. Oh, yeah!

6WH brought his cards over to save postage. Hi! Told a few W. Aust. hot yarns.

5MD presented with FB cup by Mr. De Cure for best article contest held last December.

5ZX also received trophy for his piece of work in the limited contest.

5LL has wrked his first Yank, also PK2KO. FB for 7 watts input to a T.N.T.

5JC hrd QSO'ing few Yanks on tone with R7 repts. Says P.P. mod, the Berries.

5GR re-appeared on 28 m.c. and QSO'ed few ZL's.

5KH deserting 200 m.x. for 10 m.x.

5LG? Not a word frm. Hrd that the air at Burnside is very clear nw. Hw cum? Gess Leith's ether buster used to jam things.

5TX, QRP king, hrd on 80 m.x. using Telefunken mod. QSO 5XJ.

5BU has started by wrking few Yanks.

5XA, 5LP es 5KL all went bargain-hunting one day. Don't worry, we didn't buy anything. Hi!

5DA on the quiet wrking sum DX on 20 m.x.

5FM hrd on agn. Using grid mod.

5LD couldn't keep quiet at last meeting. Kept yelling out for a drink. Gess fergot his table manners. Hi!

Our Hon. Secretary, Marshall Hyder, told fb yarn, accompanied with actions. Sure broke the boys up.

Gess I'll get broke up writing these dry notes, so will QRT. Cheerio.

CLARRY.

A very quiet meeting was conducted on 7th April in the clubroom, and after concluding the business for the month a letter was read from VK2BJ. There was no lecture for the evening, and Mr. H. Burdon offered some suggestions as to subjects and class of lectures that could be undertaken and should be popular.

The Council members were summoned for a meeting for Tuesday, 14th instant. The meeting then closed, and a "free for all" chat on general topics was pronounced.

The Council has, with other things, to start preparations for the end of the current financial year, which terminates on 31st May.

As the outcome of 2BJ's letter, mentioned previously, he was met at the wharf on Easter Saturday morning, when the Orford, on which he was making the tourist trip with his wife, arrived. 7JH (president), 7PA and 7PA's 2nd op. turned out to do the welcoming, these being all we could muster, it being a holiday and the majority of the gang were out of town. After acquaintances were made and appointments for later completed, we adjourned to home for breakfast, it being then about 8.30 a.m.

After breakfast he and his ow were met and driven to a number of vantage points around the city, and a peep in at 7JH's shack was taken; also, I believe they made several tourist trips outside the city area during the few hours at their disposal. On Sunday evening they visited 7PA's shack, and I think they were very satisfied, winding up after 11 p.m. to return to the boat.

Since the new year VK7 has added no less than six A.O.P.C.'s. Some have already acquired their licences, and others are preparing for early applications, so things here are looking up.

The Technical School classes are well patronised again this year, and it seems they are going to prove most satisfactory to the ham element here as well as the trade branch.

Have not got much in the way of jottings for this month. The usual few are operating in the Southern end, and information from the Northern members is as the proverbs say —. Conditions on 40 and 20 metre bands are rather patchy at present, some good DX work being heard at times, but most work being done with W's. QRM and QRN are very bad sometimes. We regret to say that Tasmania's grand old man of radio, 7AH, is not experiencing the best of health of late. Although he is about again, he has to take it very easily—not forgetting your Kruschen, Pop!

Western Australian Division

MORE VK6's ACTIVE.

(By VK6SA.)

Since South American signals started coming through to W.A. on 28m.c., interest certainly revived among VK6's, and now there are quite a number active on this band. 6MN is hard at it looking for HJ or OA, and has worked VK's, J, OH7NF and ZU6P. 6FO also on the warpath, working ZS, PK, J and a number of VK's. 6FL works VK3's and 5's with ease, and has heard a number of DX signals which he has been unable to raise so far.

After working a few VK's, VK6BO had a doubtful QSO with OH7NF, who gave him QSA2. 6NO was heard by VK3YP one day while using a transmitter only and calling to get reports. 6LR at Northam is rumoured to be on 28m.c., but owing to skip has not been heard here.

Quite a few ZL's are coming through and ZL1BA has heard both 6FO and 6MN, but was unable to raise them. 6SA has been trying to cut down the time for WAC on Ten, the best so far being in seven hours. A number of contacts were made with HJ3AJH, OA4J and HP1A, the former being the easiest DX station to QSO at present! It is remarkable how late these stations come through, as it is after 1 a.m., their time. It may be possible to work W's in the evenings here soon, as the summer comes on over there. A W8 was heard on the 10th April at 7 p.m., working ZS1H. The W was dead weak, but it shows the possi-

bility may come later on. When HJ3AJH is worked at noon here, it is doubtful which way the signals go, as daylight is about equal each way. Ten m.x. does not appear to be so much of a daylight band as they try to make out.

DO YOU REMEMBER—

When "Twenty Metres" meant anywhere between 19 and 24 metres, and the Aussies were on 32 and 35, the Yanks between 37.5 and 43, and the Canadians on 52?

When the present "W's" were "U's" and the locals "A" and "OA"?

When the ARTL and WIA were rival organisations with similar aims?

When Harry Kauper worked U6HM (Claire Foster) with a ux 199 and only 20 volts or so on it?

When Ross Hull was A3JU?

When the ambition of all was a T250, with about 3000 volts of rac.

When Ross Hull was asked if he spelt "zoo" as "zee oo oo"?

When the phone gang used 440 metres and the broadcast stations had acoustic gramophones and carbon mikes, and you listened to them with phones or a horn speaker?

And LP1 on 32 metres—and single slide tuners—and loose-couplers—and honeycomb coils—and VIM on spark?

Then, if you do you're no longer a Young Squirt, you're getting to be an Old Timer and should have more sense than to stick at the game!

—VK3RX.

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